

**Amendment to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of the Claims:**

1.-118. (Cancelled)

119. (Currently Amended) A composition which comprises:

- a) a conjugate of (i) ~~a GM2 ganglioside derivative which comprises an unaltered oligosaccharide part and an altered ceramide portion comprising an altered sphingosine base,~~ a derivative of a GM2 ganglioside which GM2 ganglioside comprises an unaltered sphingosine base, wherein the derivative differs from the GM2 ganglioside solely by having an altered sphingosine base which retains only C1 through C4 from the unaltered sphingosine base of the GM2 ganglioside, and (ii) Keyhole Limpet Hemocyanin[[]], wherein the GM2 ganglioside derivative is covalently bound to Keyhole Limpet Hemocyanin by a stable amine bond between the C-4 carbon of the altered sphingosine base and a nitrogen of an  $\epsilon$ -aminolysyl group of Keyhole Limpet Hemocyanin;
- b) ~~QS-21, a saponin derivable from the bark of a Quillaja saponaria Molina tree; and~~
- c) a pharmaceutically acceptable carrier, [[]]

wherein the amount of the conjugated GM2 ganglioside derivative is an amount between about 1 µg and about 200 µg, the amount of ~~the saponin~~ QS-21 is an amount between about 10 µg and about 200 µg, ~~and~~ the GM2:Keyhole Limpet Hemocyanin molar ratio is from 200:1 to 1400:1, and the relative amounts of such conjugate and ~~such saponin~~ QS-21 is being effective to stimulate or enhance production in a subject of an antibody to the GM2 ganglioside.[[,]]

~~wherein in the conjugate the ganglioside derivative is covalently bound to the Keyhole Limpet Hemocyanin by a stable amine bond between the C-4 carbon of the altered sphingosine base of the altered ceramide portion of the ganglioside derivative and the nitrogen of an ε-aminolysyl group of Keyhole Limpet Hemocyanin.~~

120.-125. (Cancelled)

126. (Currently Amended) The composition of claim 119 wherein the amount of QS-21 ~~the saponin~~ is about ~~100~~ 50 µg.

127. (Currently Amended) The composition of claim 119 wherein the amount of QS-21 ~~the saponin~~ is about 200 µg.

128. (Cancelled)

129. (Currently Amended) The composition of claim 119 which comprises:

- a) a conjugate of (i) ~~a GM2 ganglioside derivative which comprises an unaltered oligosaccharide part and an altered ceramide portion comprising an altered sphingosine base,~~ a derivative of a GM2 ganglioside which GM2 ganglioside comprises an unaltered sphingosine base, wherein the derivative differs from the GM2 ganglioside solely by having an altered sphingosine base which retains only C1 through C4 from the unaltered sphingosine base of the GM2 ganglioside, and (ii) Keyhole Limpet Hemocyanin[[;]], wherein the GM2 ganglioside derivative is covalently bound to Keyhole Limpet Hemocyanin by a stable amine bond between the C-4 carbon of the altered sphingosine base and a nitrogen of an  $\epsilon$ -aminolysyl group of Keyhole Limpet Hemocyanin;
- b) ~~QS-21, a saponin derivable from the bark of a Quillaja saponaria Molina tree;~~ and
- c) a pharmaceutically acceptable carrier,[[;]]

wherein the amount of the conjugated GM2 ganglioside derivative is present in an amount between about 1  $\mu$ g and about 200  $\mu$ g, the amount of ~~the saponin~~ QS-21 is about 100  $\mu$ g, ~~and~~ the GM2:Keyhole Limpet Hemocyanin molar ratio is from 200:1 to 1400:1, and where the relative amounts

~~amount~~ of such conjugate and ~~such saponin QS-21~~ is effective to stimulate or enhance production in a subject of an antibody to the GM2 ganglioside.~~[[;]]~~

~~and wherein in the conjugate the ganglioside derivative is covalently bound to the Keyhole Limpet Hemocyanin by a stable amine bond between the C-4 carbon of the altered sphingosine base of the altered ceramide portion of the ganglioside derivative and the nitrogen of an  $\epsilon$ -aminolysyl group of Keyhole Limpet Hemocyanin.~~

130. (Currently Amended) A method of treating a subject afflicted with melanoma which comprises administering to said subject an amount of the composition of claim 129 effective to stimulate or enhance production in a subject of an antibody to the GM2 ganglioside and to thereby treat said melanoma in said subject.

131. (Currently Amended) A method of stimulating or enhancing production of an antibody directed to the GM2 ganglioside in a subject which comprises administering to the subject an effective amount of a composition which comprises:

a) a conjugate of (i) ~~a GM2 ganglioside derivative which comprises an unaltered oligosaccharide part and an altered ceramide portion comprising an altered sphingosine base,~~ a derivative of a GM2 ganglioside

which GM2 ganglioside comprises an unaltered sphingosine base, wherein the derivative differs from the GM2 ganglioside solely by having an altered sphingosine base which retains only C1 through C4 from the unaltered sphingosine base of the GM2 ganglioside, and (ii) Keyhole Limpet Hemocyanin[[;]], wherein the GM2 ganglioside derivative is covalently bound to Keyhole Limpet Hemocyanin by a stable amine bond between the C-4 carbon of the altered sphingosine base and a nitrogen of an  $\epsilon$ -aminolysyl group of Keyhole Limpet Hemocyanin;

- b) ~~QS-21, a saponin derivable from the bark of a Quillaja saponaria Molina tree; and~~
- c) a pharmaceutically acceptable carrier,[[;]]

wherein the amount of the conjugated GM2 ganglioside derivative is an amount between about 1  $\mu$ g and about 200  $\mu$ g, the amount of ~~the saponin~~ QS-21 is an amount between about 10  $\mu$ g and about 200  $\mu$ g, ~~and~~ the GM2:Keyhole Limpet Hemocyanin molar ratio is from 200:1 to 1400:1, and the relative amounts of such conjugate and ~~such saponin~~ QS-21 is being effective to stimulate or enhance production in a subject of an antibody directed to the GM2 ganglioside.[[,]]

~~wherein in the conjugate the ganglioside derivative is covalently bound to the Keyhole Limpet Hemocyanin by a stable amine bond between~~

~~the C-4 carbon of the altered sphingosine base of the altered ceramide portion of the ganglioside derivative and the nitrogen of an  $\epsilon$ -aminolysyl group of Keyhole Limpet Hemocyanin so as to thereby stimulate or enhance production in said subject of the antibody directed to GM2.~~

132. (Currently Amended) A method of treating a human subject having cancer which comprises administering to the subject an effective amount of a composition which comprises:

- a) a conjugate of (i) ~~a GM2 ganglioside derivative which comprises an unaltered oligosaccharide part and an altered ceramide portion comprising an altered sphingosine base,~~ a derivative of a GM2 ganglioside which GM2 ganglioside comprises an unaltered sphingosine base, wherein the derivative differs from the GM2 ganglioside solely by having an altered sphingosine base which retains only C1 through C4 from the unaltered sphingosine base of the GM2 ganglioside, and (ii) Keyhole Limpet Hemocyanin[[]], wherein the GM2 ganglioside derivative is covalently bound to Keyhole Limpet Hemocyanin by a stable amine bond between the C-4 carbon of the altered sphingosine base and a nitrogen of an  $\epsilon$ -aminolysyl group of Keyhole Limpet Hemocyanin; and

- b) ~~QS-21, a saponin derivable from the bark of a Quillaja saponaria Molina tree;~~ and
- c) a pharmaceutically acceptable carrier,[[;]]

wherein the amount of the conjugated GM2 ganglioside derivative is an amount between about 1 µg and about 200 µg, the amount of ~~the saponin~~ QS-21 is an amount between about 10 µg and about 200 µg, and the GM2:Keyhole Limpet Hemocyanin molar ratio is from 200:1 to 1400:1, and the relative amounts of such conjugate and ~~such saponin~~ QS-21 is being effective to stimulate or enhance production in a subject of an antibody to the GM2 ganglioside~~[[,]]~~

~~wherein in the conjugate the ganglioside derivative is covalently bound to the Keyhole Limpet Hemocyanin by a stable amine bond between the C-4 carbon of the altered sphingosine base of the altered ceramide portion of the ganglioside derivative and the nitrogen of an ε-aminolysyl group of Keyhole Limpet Hemocyanin so as to stimulate or enhance production in the subject of the antibody to GM2 and thereby treat the subject.~~

- 133. (Previously Presented) The method of claim 132, wherein the cancer is of epithelial origin.
- 134. (Previously Presented) The method of claim 132, wherein the cancer is of neuroectodermal origin.
- 135. (Currently Amended) The method of claim 134,

wherein the cancer of neuroectodermal origin is  
a melanoma.

136. (Previously Presented) The method of claim 131 or  
132, wherein the administering is effected at  
two or more sites.

137. (Previously Presented) The method of claim 136,  
wherein the administering is effected at three  
sites.

138. (Previously Presented) The method of claim 131 or  
132, wherein the composition is administered  
subcutaneously to said subject.

139. (Previously Presented) The method of claim 138,  
wherein the composition is administered to said  
subject at two-week intervals.

140. (Previously Presented) The method of claim 138,  
wherein the composition is initially  
administered to said subject at weekly  
intervals.

141. (Currently Amended) The method of claim 131 or  
132, wherein the composition to be administered  
is prepared prior to administration to the  
subject by mixing the conjugate and ~~the saponin~~  
QS-21.

142. (Currently Amended) The method of claim 141,  
wherein the conjugate and ~~the saponin~~ QS-21 are



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mixed on the day of administration to the  
subject.

143. (Cancelled)